

# **Firm's Recruiting Process**

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Firm is recruiting  $l$  workers by posting  $\hat{v}$  vacancies  
 → Compute matching wedge  $\hat{\tau}(\theta)$  gap b/w  
 # of producers  $n$  & # of employees  $l$

$$\text{employees} = \text{producers} + \text{recruiters}$$

$$l = n + \hat{v} \times \hat{p}$$

$$n = l - \hat{p} \times \frac{l}{\hat{q}(\theta)} \quad \leftarrow \text{recruiting proba}$$

$$n = \left[ \frac{\hat{q}(\theta) - \hat{p}}{\hat{q}(\theta)} \right] \cdot l$$

$$l = \frac{\hat{q}(\theta)}{\hat{q}(\theta) - \hat{p}} \times n$$

Matching wedge:

$$\hat{\tau}(\theta) = \hat{p} / [\hat{q}(\theta) - \hat{p}]$$

$\hat{\tau}(\theta)$  is increasing in  $\theta$

$$l = \left[ 1 + \frac{\hat{p}}{\hat{q}(\theta) - \hat{p}} \right] \times n$$

↑  
employees

↑  
producers

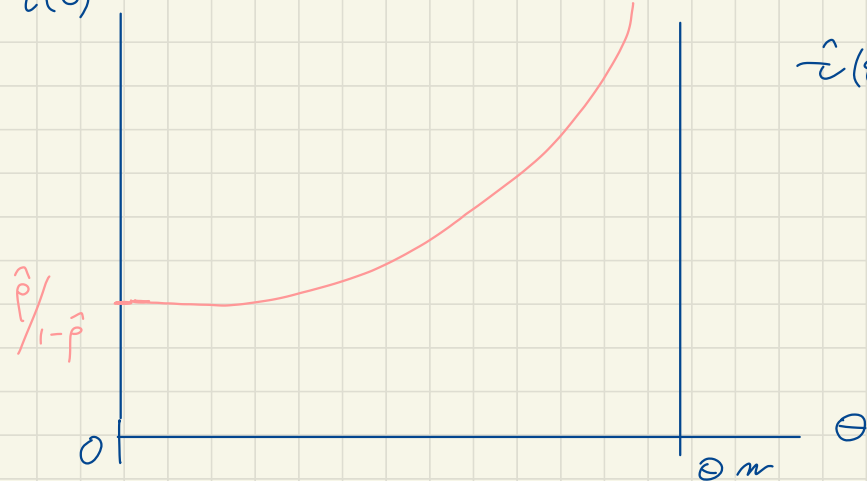
$$l = [1 + \hat{\tau}(\theta)] n$$

$\frac{\text{recruiter}}{\text{producer}}$

$\hat{\tau}(\theta)$ : matching wedge, # recruiters per producer

$\hat{z}(\theta) > 0$ , increasing in  $\theta$ , defined on  $[0, \theta^m)$

where  $\hat{q}(\theta^m) = \rho$  .  $\lim_{\theta \rightarrow \theta^m} \hat{z}(\theta) = +\infty$



$$\hat{z}(\theta) = \frac{\hat{p}}{1-\hat{p}}$$